

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 57-190697

(43)Date of publication of application : 24.11.1982

(51)Int.Cl.

C02F 3/20

B05B 1/02

(21)Application number : 56-074676

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(22)Date of filing : 18.05.1981

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## (54) AIR DIFFUSION APPARATUS

### (57)Abstract:

**PURPOSE:** To prevent the clogging of the air diffusing apparatus by a method wherein small pore sizes of plural porous plate provided to an air diffusing part are made different respectively and porous plates are arranged from one having a large small pore size successively from an air sending direction toward an air diffusing direction.

**CONSTITUTION:** Air sent from a branched pipe 17 pushes a check valve 19 and, after said air is flowed into the air chamber 18a of an air diffusing part 18, it is injected into a mixed liquid 12 as a small gas bubble stream through each porous plates 24, 25, 26, a non-woven fabric 27 and a fluorine resin film 28. In this case, air flowed into the air chamber 18a is formed into small air bubbles at first during a time when passed through small pores 24a of the first porous plate 24. Said air bubbles are formed into further smaller air bubbles by small pores 25a of the second porous plate 25 and further formed into further smaller air bubbles by small pores 26a of the third porous plate 26. At last, said air bubbles are injected from the non-woven fabric 27 and small pores 28a of the fluorine resin film 28.

